

# Acer Multi-Functional 7-in-1 VideoCam

Model: SV-200

# User's Guide



# **PCSafety Precautions**

#### Dear Users.

Please read this manual thoroughly before you start to use your SV-200("SV2" for short). In addition, please keep this manual properly, if there is any question about SV2 in the future, please help yourself to find the answer within. However, if you are still unclear about the answers obtained, please contact your retail for further assistance.

#### **Important Notices**

User should be responsible on any substantial damages caused by not complying with the instruction of the manual or using any component/part which is not genuine from the manufacturer.

The product provides high image and recording quality, however, poor performance due to improper use or poor maintenance are not warranted by the manufacturer.

The manufacturer takes no responsibility on any content damage and substantial lost due to the malfunction or damage of SV2 and its accessories

Warranty will be immediately expired if the SV2 is substantial damages to the user not comply with the instruction of the manual or disassemble the product by him/herself.

The actual operations, controls, and menu items might be different from this manual. The manufacturer holds no responsibility to update the manual immediately.

Other company's product names or trademarks are used herein for identification purpose only and belong to their respective companies.

#### Introduction

The Acer Multi-Functional 7-in-1 VideoCam integrated the functions of video recording (MPEG4 format), photo shotting, audio recording, MP3 playback, PC camera, and USB Storage Drive, SD/MMC card reader into a popular seven-in-one product. Its light weight, outstanding power efficiency, simple operation, long usage time, and high resolution provides the best companion and tool to the business person, students, and travelers.

Its versatile features not only fulfill for business requirements, but also satisfy entertainment needs. It can support your work from all aspects, and provide the most of funs to your life. We appreciate your selection to our product and wish it can provide you a brand new life style and experience.

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# **PC1 Preparations**

# 1-1 Accessories

SV2

Power adaptor





**Battery** 

SD memory card (Optional)



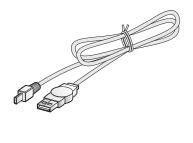


1

A/V cable

**USB** cable



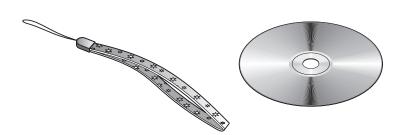


Stereo headphone



Hand strap

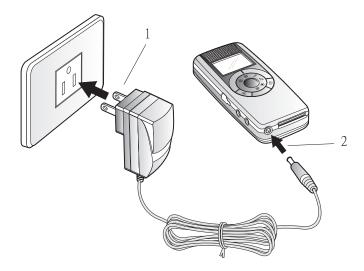
**Companion CD** 



# 1-2 Using AC power adaptor

AC Adapter can provide necessary power to DC, it can also recharge the battery.

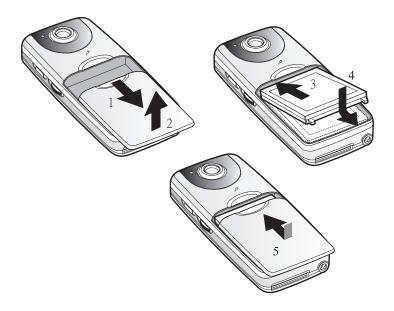
Plug the AC end of the adaptor to the wall(1), and plug the DC end of the adaptor to the DC-in jack of the SV2 (2).



# 1-3 Using Battery

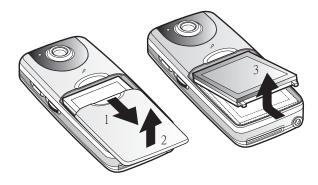
# Battery installation:

Put SV2 on a desk, front face down. Gently push battery cover toward the bottom of the SV2 to remove it. (1,2) Put the metal contact end of the battery align with the metal battery contact within SV2. Slide the battery into the bay with 45° slant angle. (3) Then, push the entire battery into the bay. (4) When confirming the battery is in its proper position, replace the cover, and push the cover toward the direction of the top of the SV2 until the cover is fully closed. (5)



#### Battery removal:

Put SV2 on a desk, front face down. Gently push battery cover toward the bottom of the SV2 to remove it. (1,2) Lift bottom end of the battery, about 45° (3) and take the battery out of the bay. When done, replace the cover, and push the cover toward the direction of the top of the SV2 until the cover is fully closed.



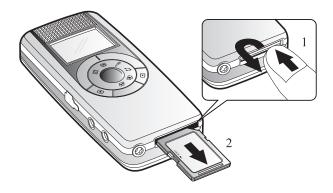
Note: Please be aware of the direction and angle of inserting/removing battery to avoid breaking the plastic stop of the bay.

# 1-4 Installing SD Memory Card(Optional)

Put the slant corner of the SD card toward upper right, and push the card into the SD card slot at the bottom of SV2.



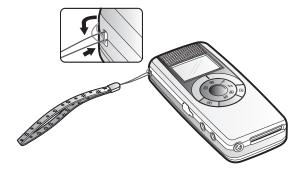
To remove the card, push the card firmly into the slot, then release. The card will be ejected from the slot. You can remove the card at that time.



Note: When inserting and removing the SD memory card, please be sure you turned the power off.

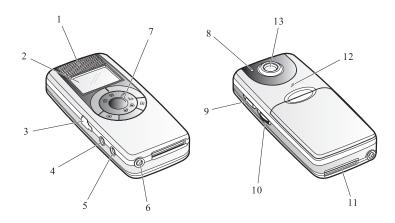
# 1-5 Installing the Hand Strap

- 1. Put the thin end of the strap through the strap eyelet.
- **2.** Put the longer end of the strap through the loop of the thinner end. Gently pull the longer end to tight up the strap to the eyelet.



# PC2 Touring Your SV2

# 2-1 Knowing your SV2



	Front panel
1	Speaker
2	Screen
7	Mode switch
	Left hand side
3	USB port
4	A/V output
5	Headphone jack
Right hand side	
9	Power button

10	Jog dial switch	
	Rear panel	
8	Status LED	
13	Lens	
12	Microphone	
Bottom		
6	DC-in jack	
11	SD memory card slot	

# 2-2 Operation

#### Power button:

When turning on, press  $\circlearrowleft$  button at the right hand side of SV2 until screen goes live.

When turning off, press  $\bigcirc$  button at the right hand side of SV2 for about three seconds until the screen shuts off. Then the SV2 is turned off.

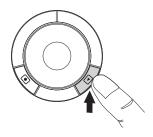
#### Mode switch:

Switching between modes of video recording  $\[ \]$ , photo taking  $\[ \]$ , audio recording  $\[ \]$ , MP3 playback  $\[ \]$ , PC camera  $\[ \]$ . The mode switch can be rotated in clockwise or counterclockwise direction. When individual icon is aligned with the mark at outer ring, that particular mode is enabled and operate-able.



#### Control button:

- button can start/stop recoding/ playback
- button can switch the SV2 between recording and playback function or back to upper level of menu items.



Note: The function of these two buttons varies with different modes.

# Jog dial switch:

Located at right hand side of the SV2, under the power button, you can dial it upward, downward, or push it.

The function of this switch include execute, focus change, volume change, fast forward, browsing, and so on.



Note: The function of the switch varies with different modes.

# 2-3 Headphone

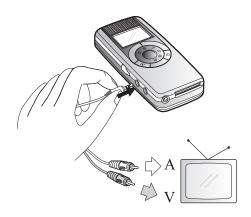
When using headphone, simply plug it into the audio jack located at the left hand side of the unit. When the headphone is plugged in, stereo audio output switches to the headphone automatically. There will be no output from the built-in speaker of SV2.



# 2-4 Video/Audio Output

All the video, photo, MP3, and audio recording of SV2 can be output to TV via its AV port. However, the audio output will be mono.

When using TV, please plug the black end of AV cable into the AV jack at the left hand side of the SV2. Meanwhile, plug the yellow line to "Video in" plug and the white line to "Audio in" plug at the rear of the TV.



# 2-5 Menu Items

# Recording function menu

	Video recording
EV	Exposure Value
	White Balance
県	Video Quality
<b>(</b> 0)	Audio Quality
X	Exit
	Photo taking
EV	Exposure Value
	White Balance
<b>③</b>	Picture Quality
<b>(</b>	Self Timer

#### 2-5 Menu Items

1	Date Stamp
X	Exit
	Audio recording
<b>(</b> 0)	Audio Quality
X	Exit

# Playback function menu

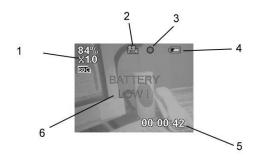
	Video mode
<b>(</b> 0)	Volume Control
	File List
	Delete Current
₩A	Delete All
$ \mathcal{L}\mathcal{I} $	Playback Repeat
X	Exit Photo mode
	File List
	Delete Current
₩A	Delete All
	DPOF Print

X	Exit
	MP3
	File List
	Delete Current
₩A	Delete All
$ \mathcal{L}f $	Playback Repeat
Х	Exit
	Audio
	File List
	Delete Current
₩A	Delete All
$ \mathcal{L}f $	Playback Repeat
X	Exit

# Setup

	Set Clock
	Set Clock
$\rightarrow$	50/60 HZ
	Video System
!	Media Format
(SFF	Auto Power Off
	Storage Select
<b>(F)</b>	Set to default

# 2-6 Screen Indications



No	Description
1	<ul> <li>a. SD card remaining space: showing SD card available memory space in percentage form. Multiply SD card total memory space by shown percentage will get available memory.</li> <li>b. Zoom indication: Applied in video recording and photo taking modes. SV2 can zoom in the image 4 times bigger with smooth digital zoom.</li> <li>c. Enabled memory: Either built-in memory or SD memory card.</li> <li>d. Current image number/total images.</li> </ul>
2	Mode Switch: showing current mode in using.
3	Status indicator: current status, such as video recording, playing back, etc.
4	Battery life indicator: Three steps indication, full is in three, represent 100% battery capacity is full. Subsequently represent 70%, 30%, and 0%.
5	Recording/Playing time: in the form of Hour : Minute : Second and accumulate from 00:00:00.  or  Date of picture taken.
6	Messages: Important messages such as battery running out, no SD card,will be shown at the middle of the screen in a significant way. Please refer to 4-5 for descriptions and explanations of the messages.

# 2-7 Setup for All Modes

Switch the mode switch to [II], and start all pre-operation setups. Dial the jog dial switch up and down can switch between modes.

#### Set Clock:

If date and time shown is incorrect, please push the jog dial switch and hence both of them can be adjusted accordingly.

The screen shows in the sequence of hour: minute: second month: date: year. White letter indicates the item being chosen currently. You can push the switch to change the item. To change numbers, dial upward or downward.



When setup is finished, push the switch until the setup screen disappears. Then the settings are successfully stored.

#### 50/60 HZ:

Switching between [50HZ] and [60HZ], default value is 60HZ.

If you need change it, push the jog dial switch (items become white color with black background), then dial the switch upward or downward to intended item. Push the switch again, and the setting is changed.



You can apply the same way to all of the following setups.

Note: Incorrect setting will reduce image quality such as results in horizontal lines on your images.

#### Video System:

Switching between [NTSC] and [ PAL]. Default is NTSC.

When setting is in [NTSC], the standard output resolution is QVGA(320x240), when setting is in [PAL], the standard output resolution is CIF (352 x 288).

NTSC standard TV output is using in Taiwan, United States, and Japan, while PAL is using in most European countries, South America, and most Asian countries.



#### Media Format:

Media format will thoroughly erase data stored in built-in memory or SD card and re-initialize it. So these memory space will be more suitable for data in SV2 format.



Note: If you wish to use SD card which has been used in other devices, it is suggested to format it before you use it. Thus, format incompatibility situation can be avoided.

#### **Auto Power Off:**

In order to save battery power, you can set SV2 to automatically power off after 1,3,5,10 minutes without any operation move. If [Disable] is selected, SV2 will not execute automatic power off.



#### Storage Select:

You can select to storing data to either 16MB built-in memory [internal] or SD memory card [SD Card].



#### Set to default:

After change settings many times, you can use this function to reset SV2 to factory default settings. Please select [Yes] to do so.



# 2-8 Battery Recharge

If you notice the battery life remains one slot only (as shown ), that is, your SV2 has remaining battery life below 30%. Please recharge your SV2 now. When recharging, the battery life indicator on the screen will flash, and the LED at the rear of LED flash red light simultaneously.

If the battery is totally used up, there will be a red message in the middle of the screen displaying "BATTERY LOW!". Several seconds later, SV2 will shut down automatically. Unless you recharge it, you will not be able to use SV2 anymore.

Note: A totally used up battery needs about 4 hours to recharge. Actually time taken may vary due to capacity and battery life difference.

# PC3 Using Your SV2

You can use <a>To switch between Recording/Taking and Play function of video recording, photo taking, and audio recording functions. MP3 has play function only.</a>

This chapter will introduce all functions clockwisely according to the sequence on them on the mode switch.

Note: When switching to video, photo, and audio mode, the default function is recording/taking.

# 3-1 Video Recording

#### Recording (Video and Audio):

**1.** Rotate the mode switch to ot 
ot 
ot 
ot



2. If you need to set video quality, press the jog dial switch to activate setup menu. Dial the switch downward and select Video Quality. When finish, press button to confirm and exit menu display.



#### 3. Press • button to start recording.



Note: 1. If you wish to change focus, you can dial the jog dial switch upward or downward any time during recording.

- 2. When shows on screen, it is indicating SD card in use as your data storage. Otherwise, if shows, you are using internal memory.
- 3. Lower right corner of the screen displays the recording time.
- 4. The LED beside of the lens lights up in orange during recording.

#### **4.** Press • button once more to stop recording.

# Settings

You can conduct some setting changes before you start recording, so as to obtain better recording quality.

Press the jog dial switch once, you can start to change the following settings:



#### **Exposure Value:**

In addition to Normal, you can increase two levels up and decrease two levels down. Increasing Exposure Value will cause the image brighter whereas decreasing Exposure Value will get a darker image. You can make use the brightness change of the screen to gauge your adjustment.

#### White Balance:

White objects may looks extremely white under sun shine, but may not be so white in other lighting conditions. In order to compensate the color change due to various lighting conditions, you can use [White Balance] to adjust.

#### SV2 has four White Balance settings

[Auto]: Automatic detect

[Day Light]: Reduce sun light intensity and avoid over exposure

due

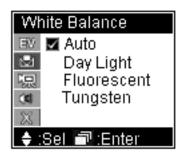
to strong sun light.

[Fluorescent]:Reduce green light within fluorescent light, avoid greenish image taken under

fluorescent light.

[Tungsten]: Reduce orange light within

tungsten light, avoid orange image taken under tungsten light.



# Video Quality:

[High]: Recording in the highest

image quality.

[Good]: Recording in normal high

image quality.

[Economic]: Recording in space saving image quality.

The higher image quality recorded, the more memory space will be taken. Please refer 4-4 for details of memory

space taken by each mode.



#### **Audio Quality:**

[High]: Recording in the best audio

quality.

[Good]: Recording in ordinary good

audio quality.

[Economic]: Recording in space saving

audio quality.

The better audio quality recorded, the more memory space will be taken.

Please refer 4-4 for details of memory space taken by each mode.



# Playback (both Video and Audio)

[High]: Recording in the best audio

quality.

[Good]: Recording in ordinary good

audio quality.

[Economic]: Recording in space saving

audio quality.

The better audio quality recorded, the more memory space will be taken.

Please refer 4-4 for details of memory space taken by each mode.



# Playback (both Video and Audio)

1. Select 🛱 on mode switch,



2. And press ■ button to switch to playback function



- Note: 1. When button is pressed, SV2 will playback your latest recording automatically. During playback, you can push the jog dial switch upward and downward to conduct fast forward and backward.
  - 2. The current file number/total file number is shown at the upper left corner of the screen.
  - 3. The playback duration is shown at the lower right corner of the screen

#### 3. press button to stop playback.

Note: You can push the jog dial switch upward and downward to conduct fast forward and backward. When playback is stopped, if you dial the jog dial switch upward and downward, you will be able to jump to next or previous recording available to play.

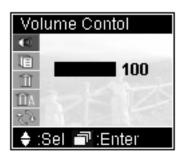
#### Settings

You can select the video to be played, delete it, and set up a repeated play.

Press the jog dial switch, you can start the following settings:

#### Volume Control:

Press the jog dial switch, dial the switch upward or downward to increase or decrease audio volume.



#### File List:

Displays all video files recorded. File names in red are files previously selected or currently playing. The name in white represents file being selected now. Press the jog dial switch to start playing this file



#### Delete Current:

Select [Yes] to delete current file.



#### Delete All:

Select [Yes] to delete all files.



Note: There will be no further warning or confirmation message after you selected [Yes] in both "Delete Current" and "Delete All". Please be careful on using these commands.

#### Playback Repeat:

There are three options:

[Off]: Stop when finishes playing

selected file. That is, the selected file will be played

once only.

[Current]: Play currently selected file

repeatedly.

[Sequential]: Play all files in sequence,

repeatedly.



# 3-2 Photo Shooting

# How to take a photo:

1. Select 📵 on mode switch



2. If you need to set picture quality, please press jog dial switch to get menu. Then dial the switch downward, and select "Picture Quality". When selected, press button to exit menu.



- **3.** If you wish to change focus, you can dial the jog dial switch upward (zoom in) or downward (zoom out).
- **4.** Aim the target and press shutter button .

Note: When shutter button is depressed, "Processing" message will be shown on the screen for about one second. Please keep the camera steady to ensure picture quality.



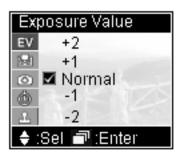
#### Settings

You can change some settings before taking the picture to get a better photo result.

Press the jog dial switch, and you can change the following settings:

#### Exposure Value:

In addition to normal, you can increase/decrease two more steps. Increasing Exposure Value will let you obtain a brighter image and decrease the value will get a darker on. You can visualize the brightness variation on the screen while you are adjusting.



#### White Balance:

White objects may looks extremely white under sun shine, but may not be so white in other lighting conditions. In order to compensate the color change due to various lighting conditions, you can use "White Balance" to adjust.

SV2 has four White Balance settings¢w

[Auto]: Automatic detect

[Day Light]: Reduce sun light intensity and avoid over exposure due to strong sun light.

[Fluorescent]:Reduce green light within fluorescent light, avoid greenish image taken unde fluorescent light.

[Tungsten]:Reduce orange light within tungsten light, avoid orange image taken under tungsten light.

#### Picture Quality:

[High]: Taking picture in the highest

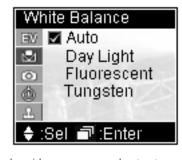
image quality.

[Good]: Taking picture in a normal

image quality.

[Economic]: Taking picture in a space saving image quality.

The higher image quality taken, the more memory space will be needed. Please refer 4-4 for details of memory space taken by each mode.



#### Self Timer:

[Disable]: Self timer disabled.

[Enable]: Photo will be taken 10seconds

later.

When using self timer, the LED at the rear of the SV2 will flash orange.



#### Date Stamp:

 $\hbox{[Disable]:} \quad \hbox{no date stamp on photo.} \\$ 

[Enable]: Imprint date at lower left corner of the photo with blue

font



#### Playback:

1. Select 🕝 on mode switch

**2.** Press **■** button to switch to playback mode.





- Note: 1. When icon button is pressed, SV2 will display latest picture taken automatically.
  - 2. The current photo number/total photo number is shown at the upper left corner of the screen.
  - 3.The date of picture taken will be displayed at the lower right corner of the screen.
  - 4.If time stamp is set, the date of that specific photo being taking will be displayed or printed at lower left corner in blue fonts.

If you wish to browsing other photos, you can dial the jog dial switch to move forward or backward with the photos to view next or previous photo.

## Settings

You can select picture, delete picture and set DPOF (Digital Printer Order Format, which can allow you to print photos directly from any printer that supports this protocol) for selected photo.

Press jog dial switch once to change the following settings:

#### File List:

Displays all file names of photo taken. File names in red are the photos previous or current in display. White file name represents file being selected now. Press the jog dial switch to start viewing this photo.



#### **Delete Current:**

Select [Yes] to delete currently selected file.



#### Delete All:

Select [Yes] to delete all files.



Note: There will be no further warning or confirmation message after you selected [Yes] in both "Delete Current" and "Delete All". Please be careful on using these commands.

#### **DPOF Print:**

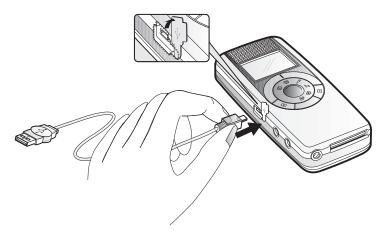
If [On] is selected means this photo can be printed from any printer that supports this protocol.



# 3-3 MP3 Playback

Download MP3 files from you PC:

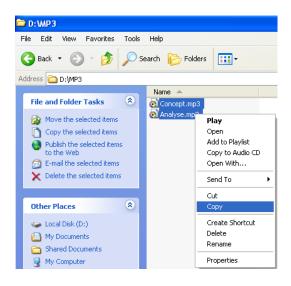
1. Use the USB cable in the package and plug it into the Mini USB port • located at the left hand side of SV2.



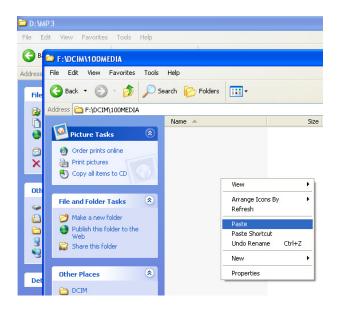
- **2.** If you are using Windows® XP or Windows® 2000 operating system, your PC will detect SV2 automatically. However, if you are using other version of Windows®, you will need to install the driver contains in the companion CD. So your PC will recognize SV2. Regarding how to use CD and conduct USB driver installations, please refer to 4-3 for instructions.
- **3.** Duplicate MP3 files to designated folder in DC. For example, if your PC recognizes SV2 as F drive, then you need to copy the MP3 files to F:\DCIM\100MEDIA

The way of MP3 files duplication:

Select the files you wish to duplicate, and hold the right key of your mouse. Right click "Copy" in the menu shown.



Click on the designated folder (G:\DCIM\100MEDIA, for example), Right click, select "Paste" in the menu shown.



Note: You can either repeat the above process several times to copy individual files or you can select multiple files and copy them at once. Detail about how to Copy and Paste, please refer to user's manual of your operating system.

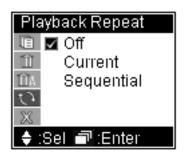
- **4.** After finishing copy and paste process, execute "Remove Hardware" and stop SV2.
- **5.** Remove USB cable from your PC and SV2. Keep it properly.

Note: Regarding how to remove hardware from your PC, please refer to your PC or operating system user's manual.

# Playback MP3:

1. Select \( \sigma \) on mode switch.





**2.** Within File List, you dial the jog dial switch upward or downward to browse the MP3 files stored in the SV2. When selected, press the switch to play.



**3.** When MP3 playback starts, SV2 will turn off the screen to save battery power. Press **◄** or the jog dial switch will resume screen display.

During playback, you can dial jog dial switch upward or downward to change volume.

## Settings

#### Delete Current:

Select [Yes] to delete current file.



#### Delete All:

Select [Yes] to delete all files.



Note: There will be no further warning or confirmation message after you selected [Yes] in both "Delete Current" and "Delete All". Please be careful on using these commands.

## Playback Repeat:

There are three choices,

[Off]: Stop when playback finishes.

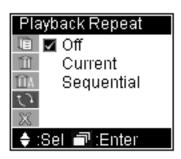
Selected MP3 plays once only.

[Current]: Playback current MP3

repeatedly.

[Sequential]: Playback all MP3 files in

sequence, repeatedly.



# 3-4 Audio Recording

# Recording:

1. Select 🔋 on mode switch.



**2.** If you need to change recording quality, please press the jog dial switch to activate Audio Quality menu.



[High]: Recording in the best audio quality.

[Good]: Recording in ordinary good audio quality.

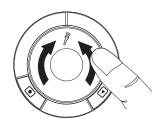
[Economic]: Recording in space saving audio quality.

The better audio quality recorded, the more memory space will be taken. Please refer 4-4 for details of memory space taken by each mode

3. Press • button to start recording, press once more to stop.

# Playback:

1. Select  $\hat{\eta}$  on mode switch.



**2.** Press button to switch to playback function. The SV2 will start to playback your latest recording. If you need to adjust volume, dial the jog dial switch upward (increase volume) or downward (reduce volume).

### Settings

You can select specific file to playback, to delete, or set up different ways to playback.

Press the jog dial switch once, you can change the following settings:

#### File List:

Displays all files recorded. Red file names are files previously played or currently playing. White file name represents the currently selected file. Press the jog dial switch once to start playing.



#### **Delete Current:**

Select [Yes] to delete current file.



#### Delete All:

Select [Yes] to delete all files.



Note: There will be no further warning or confirmation message after you selected [Yes] in both "Delete Current" and "Delete All". Please be careful on using these commands.

#### Playback Repeat:

There are three choices,

[Off]: Stop playing when finishes.

Selected file will be played

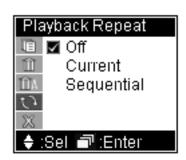
only once.

[Current]: Playback currently selected

file repeatedly.

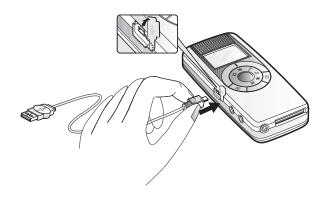
[Sequential]: Play all files in sequence,

repeatedly.



### 3-5 PC Camera

1. Plug the USB cable packaged with SV2 into the Mini USB port located at the left hand side of SV2.



Note: When USB cable is plugged in, the screen display will disappear. The display will resume when USB cable is removed.

**2.** Please use the companion CD to install PC camera driver of SV2. Thus, your PC will be able to recognize your SV2 as a PC camera.

Note: If you have not installed USB driver, please install it before you install PC camera driver. Please refer to 4-3 for the instruction to install USB and PC camera drivers.

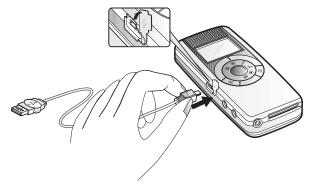
**3.** You can use Windows® Movie Maker to record video or use Microsoft® NetMeeting to conduct a video conference. Please refer to respective software's user's manual for instructions about using individual software.

PC camera does not have playback function. It has no need to change settings either.

# 3-6 USB Storage Drive

Except when using SV2 as a PC camera, all the rest modes allows you to connect SV2 with your PC via USB cable, and use SV2 as an USB removable disk.

1. Plug the USB cable packaged with SV2 into the Mini USB port located at the left hand side of SV2.



When the USB cable is plugged in, the screen shows "USB STORAGE" first, and turns off immediately. The screen display will resume when USB cable is unplugged.

2. If your PC is using Windows® XP or Windows® 2000 operating system, then the PC will recognize SV2 automatically. If you are using other operating system, then you need to install driver within the companion CD to allow your PC to recognize your SV2.

# PC4 Miscellaneous

# 4-1 Taking Care of Your SV2

#### About SV2:

Be aware of where you store your SV2. Keep SV2 and its accessories out of children's reach.

Keep SV2 dry--rain and moisture may damage the electronic parts within SV2. If there is water splashes onto the body of SV2, please use dry soft cloth to wipe water drops away. If SV2 is wetted by seawater, please use wet soft cloth to wipe seawater away. Then use dry soft cloth to wipe it dry. If water has already leaked into the body of SV2, please bring the SV2 to authorized maintenance center for repair. Do not open up the machine by yourself. Open up/disassemble the SV2 improperly may cause severe damage to the electrical parts. Your warranty will also be expired immediately with such a move.

Clean the SV2-- Except lens, you can use wet soft cloth to clean the body. Be sure the wet cloth has been twisted to dry enough. Then use dry cloth to wipe the body once more. Never use liquid contains any chemical substances to wipe the machine.

Clean the Lens -- Whenever there is dust on the lens, please use an air blower to blow the dust away. You can use professional lens cleaning paper to wipe the lens as well.

## About the AC Adapter:

Please use genuine AC adaptor packaged with the SV2. Other AC adaptor may result in damage in SV2 due to different electrical characteristics.

Be aware of the place to plug your AC adaptor. Do not plug it onto the wall across a walkway. People may be tripped and SV2 may also be damaged due to someone tripping on the power cord. Please remember to bring your adaptor along when traveling. Otherwise, you may run out of battery and can not recharge your SV2.

### About the battery

Please use certified battery. Please refer to 4-6 for battery specifications. Duration of operation - Temperature may affect the duration of battery operation. Higher temperature or lower temperature may both shorten the duration of operation. Battery life may also influence the duration of operation. A battery nearly to the end of its life cycle or a poor quality life may have shorter duration of operation. Be aware of short circuit - When battery is removed from SV2, please be aware of not to touch the metal contact with metal objects or conductive substances. Short circuit the battery may cause fire. Battery disposal - Please recycle used up battery. Do not throw the battery into the fire. There may be a risk of explosion.

# 4-2 Write Protection and File Structure of SD Memory Card(Optional)

There is a write protection switch on the SD card. Switch it to LOCK can prevent data stored in SD card being erased unexpectedly.

The file structure of SV2 stored in memory is shown as below:



#### LDCIM - 100MEDIA - FILE0001.JPG - FILE0001.ASF - FILE0001.MPS

## 4-3 Software Installation and Use

You will need to install software (drivers) to enable the PC camera and USB drive modes of the SV2. There are two ways to install software. One is using the companion CD to start installation program and to execute installation. The installation software will guide users throughout the installation process reduces difficulty a lot. Another way is to connect your SV2 with PC and hence initiate the installation software. This method is more complicate in process, therefore method #1 is recommended.

We will introduce both ways in this section. If you want to choose method #1, please refer to "Using CD to install", otherwise, please refer to "Installing via connecting SV2 to PC".

## Using CD to install

There are two major steps: Step 1, insert companion CD into your PC CD drive. Do not connect your SV2 to PC for now. Step 2, connect your SV2 to PC and.

# If your PC uses Windows 98 operating system,

1. The PC will initiate
InstallShield Wizard. Click "USB
Driver" in menu.



2. In both dialog boxes showing "Welcome to the InstallShield Wizard for Digital Camera" and "Information", click on the "Next" button.



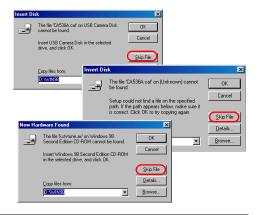
**3.** The installation will then start. When finishs, please click on the "Finish" button.



**4.** Connect your SV2 to PC. The PC will detect the new hardware. Then "Insert Disk" message shows, click "OK" button.



**5.** The "Insert Disk" warning message will show up again for consecutively three times. Click "Skip" in all occasions. Then you can finish the installation.



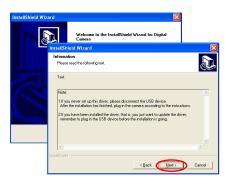
Note: Sometimes the OS will request for Windows 98 Installation CD, please make sure the Windows 98 CD is handy for use.

# If your PC uses Windows XP operating system,

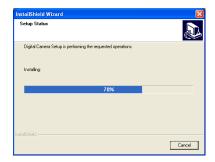
1. Insert SV2companion CD, the PC will initiate InstallShield Wizard. Click "USB Driver" in menu.



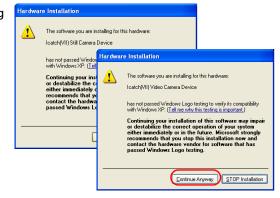
2. In both dialog boxes showing "Welcome to the InstallShield Wizard for Digital Camera" and "Information", click on the "Next" button.



**3.** The driver installation will then start and proceed automatically.



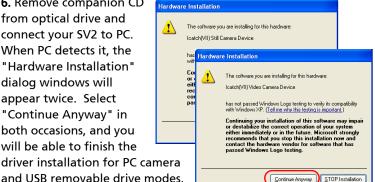
4. In the following two "Hardware Installation" dialog windows, please select "Continue Anyway" to continue the installation.



5. When installation completes, click on "Finish" to finish installation process.



**6.** Remove companion CD from optical drive and connect your SV2 to PC. When PC detects it, the "Hardware Installation" dialog windows will appear twice. Select "Continue Anyway" in both occasions, and you will be able to finish the driver installation for PC camera

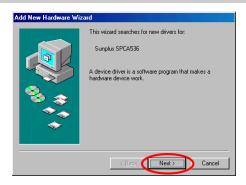


# Installing via connecting SV2 to PC Installing USB driver

Except using user Windows XP Windows 2000 operating system, all other operating systems require to install driver for SV2 to use. The procedure of installing driver under Windows 98 is shown below:

Please connect SV2 to your PC via USB cable, and dial the mode switch to any mode but PC camera, then turn on the power of SV2.

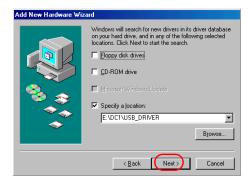
1. Your PC will detect a new device automatically. An "Add New Hardware Wizard" will appear. Click on the "Next" button.



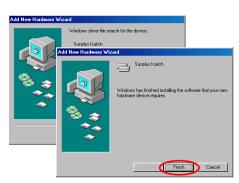
2. Select "Search for the best driver for your device. (Recommended)", and click on the "Next" button.



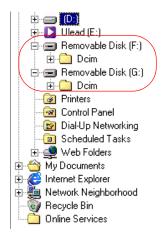
3. In the next window, Windows- will search for new drivers in its driver database on your hard drive, and in any of the following selected locations". Select "Specify a location" and then click on the "Next" button.



4. Windows- will find the SV2's USB driver in the companion CD. Click on the "Next" button to start installation. When completes, click on the "Finish" button to finish the driver installation.



5. When driver installation completes, restart your PC. You will see two removable drives in the Explorer. That is, you have installed the driver successfully. Then you can start to use SV2 and conduct file access works.

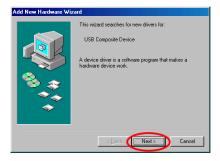


### **Installing PC Camera driver**

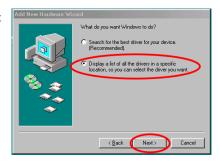
Before you start PC camera installation, please connect your SV2 with your PC via USB cable. Dial the mode switch to PC Camera, and turn on your SV2

#### Using Windows 98 operating system

1. Your PC will detect your SV2 and pop up an "Add New Hardware Wizard".
Click on the "Next" button.

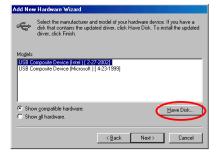


**2.** Please select "Display a list of all..." .

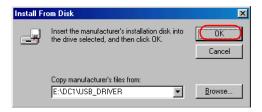


3. The system will find an unknown USB composite device for installation.

Please select "Have Disk".



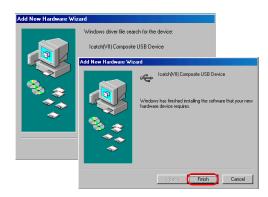
**4.** Please insert your companion CD into the CD-ROM drive, then select the CD-ROM drive as the source. Click on "OK".



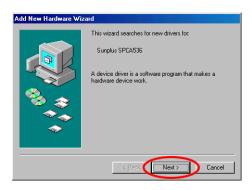
5. When system finds the hardware to be installed, please click on the "Next" button.



**6.** Click on Next to start installation. When completes, click on "Finish" to exit.

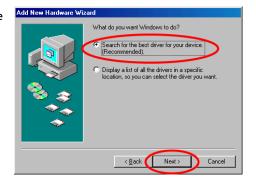


**7.** Another installation window will appear, click on "Next" button.

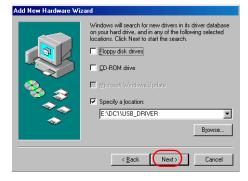


**8.** Select "Search for the best driver for your device.

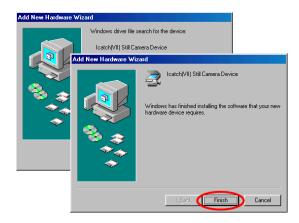
(Recommended)", and click on the "Next" button.



9. Select "Specify a location" and finds the drivers path, click on the "Next" button.



**10.** Click on the Next button to start installation. When installation completes, click on the "Finish" button.



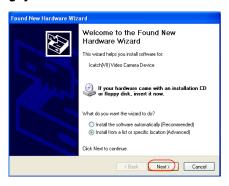
- 11. Last step of installation is exactly the same as step 7 through
- 10. When finishes, restart PC and you will be able to use SV2 as a PC camera.

Note: During the installation process, if a dialogue box shows up and requesting a Windows 98 CD-ROM, please insert a Windows 98 CD-ROM and click OK to continue installation.



#### Using Windows XP operating system:

1. Your PC will detect SV2 automatically, please select "Install from a list or specific location (Advanced)" and click on "Next" button.



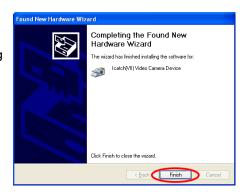
2. Insert the companion CD into CD-ROM drive and click on "Search removable media" and click on Next" button.



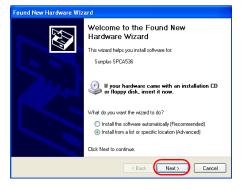
**3.** When the hardware installation window as show right appears, please click on "Continue Anyway".



**4.** The file duplication will then start. When completes, the following dialog box will appear. Click on "Finish" and start the next step of installation.



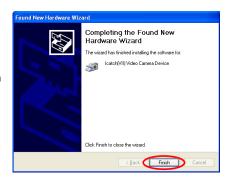
5. The second step of installation is the same as the first step. Please select "Install from a list or specific location (Advanced)" and click on "Next".



**6.** When the dialog box as show below appears, click on "Continue Anyway".



7. The file duplication will then start. When completes, the following dialog box will appear. Click on "Finish" and finish the installation.



## **Using PC Camera**

When driver is installed, you can start use your SV2 as a PC camera. There are many software can be used on a PC camera, such as Windows Movie Maker NetMeeting...etc. We hereby use Windows Movie Make as an example to explain the operation of PC camera. For other software, please refer to the user's manual or Help files of corresponding software.

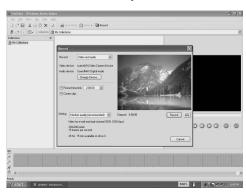
Using Windows<sup>®</sup> Movie Maker (Windows<sup>®</sup> XP accessory) to record video.

- **1.** Activate: From "Start --> Accessories-->Windows Movie Maker" to activate Movie Maker. Click on "Record" on the menu.
- 2. In Record window, click either "Video only" or "Video and

Audio" in Record pull down menu.

**3.** Click on the Record button to start video recording.

More details about Windows Movie Maker can be found in related user's manual or Help files.



# 4-4 Memory Space Consumption of Each Mode

Each mode will consume different size of memory due to their corresponding quality settings. The higher the quality set, the more memory space will be taken. The following chart shows a reference value of various scenarios. The first column is the memory capacity, and other cells are corresponding values.

## Recording Still Pictures (DSC Mode)

	High 4 Mega Pixels (2,304 x 1,704)	Good 3 Mega Pixels (2,048 x 1,536)	Economic 2 Mega Pixels (1,600 x 1,200)
16 MB	47	55	82
32 MB	94	110	164
64 MB	188	220	328
128 MB	376	440	656
256 MB	752	880	1312
512 MB	1504	1760	2624

<sup>\*</sup> The numbers shown in the above table are approximate and may vary

# **Recording Motion Pictures (MPEG4)**

	High VBR	Normal CBR(500k)	Economic CBR(300k)
16 MB	3 min	5 min	7 min
32 MB	5 min	9 min	15 min
64 MB	11 min	17 min	29 min
128 MB	22 min	35 min	58 min
256 MB	44 min	1 h 10 min	1 h 57 min.
512 MB	1 h 17 min.	2 h 20 min.	3 h 53 min

<sup>\*</sup> The times Shown in the above table are approximate.

<sup>\*\*</sup> When select in High mode during record MPEG4 motion pictures

# Voice Recording Mode

	High (22k/s)	Normal (16k/s)	Economic (12k/s)
16 MB	12 min	17 min	23 min
32 MB	25 min	34 min	46 min
64 MB	50 min	1 h 8 min	1 h 31 min
128 MB	1 h 39 min	2 h 17 min	3 h 2 min
256 MB	3 h 19 min	4 h 33 min	6 h 5 min
512 MB	6 h 37 min	9 h 6 min	12 h 8 min.

<sup>\*</sup> The times listed in the above table are approximations.

# 4-5 Message List

Message	Explain
NO FILE	When No file can playback in all playback mode.
NO DISK	Execution record/snap function when no storage exist.
DISK FULL	Execution record/snap function when no more space to store.
USB STORAGE	When USB cable plug in to active USB Storage function.
CARD LOCK	Execution record/snap function when SD Card Lock Enable.(SD card is optional)
BATTERY LOW!	Battery is totally used up.
Processing	Execution Still Snap function to tell user in processing.
FORMAT ERROR	When browse still image but current picture format can not support.

# 4-6 Specification

Resolution	4 Mega Pixel (Using Software Interpolation resolution)
Video Sensor	CMOS Sensor (2 Mega Pixel resolution)
Display Panel	1.5 inch Color TFT LCD (280x220 color resolution)
Expansion Memory	SD/MMC Card(Optional)
I/O Port	Mini USB (Support USB1.1 connect to computer), AV (Support NTSC/PAL connect to TV), SD card slot, Headphono jack
Main Memory	Build-in 16MB SDRAM, support external SD card storage (Maximin 512MB)
Auto Focus	4X
Digital Still Photo	Build-in 16MB SDRAM can storage 82 pcs (1600x1200 2M Pixel), also can be stored in SD card(Optional)
Motion Picture	With external SD card 32MB can be recorded 15 mins, (MPEG4 File Format) 64MB can be record 30 mins, 128MB can be record 55~60 mins, depend on the image color and sound
Voice Recording	With build-in 16MB SDRAM can be record 25 mins(with external SD card can be record more depend on the SD card capacity)
Internal Microphono	Yes
Internal Speaker	Yes
Motion Picture Resolution	320x240/30fps
Video Lens Focus	Auto, Macro:70cm~infinity
Brightness Control	Auto Brightness & White balance
Auto Shot Setting	10 seconds auto shot setting (user control)
Power Saving Mode	After 60 seconds no use, system will auto enter suspend mode, LCD display will auto turn off
Battery	Rechargeable 780mAh Li-lon battery with battery charger
Size	116x50x21mm (26mm at CMOS Lens portion)
Weight	100g(with battery)